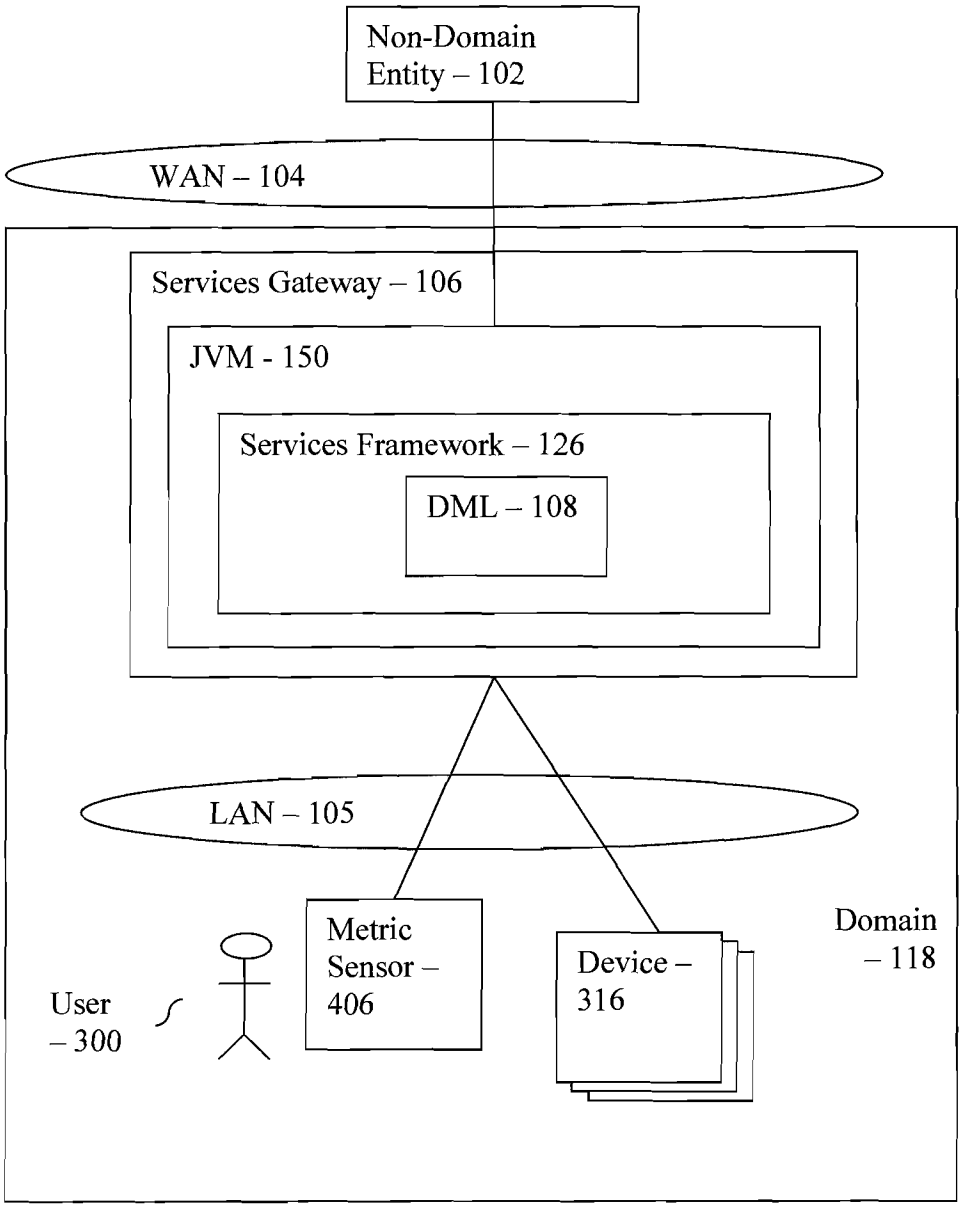

Figure 1

Informal Drawings

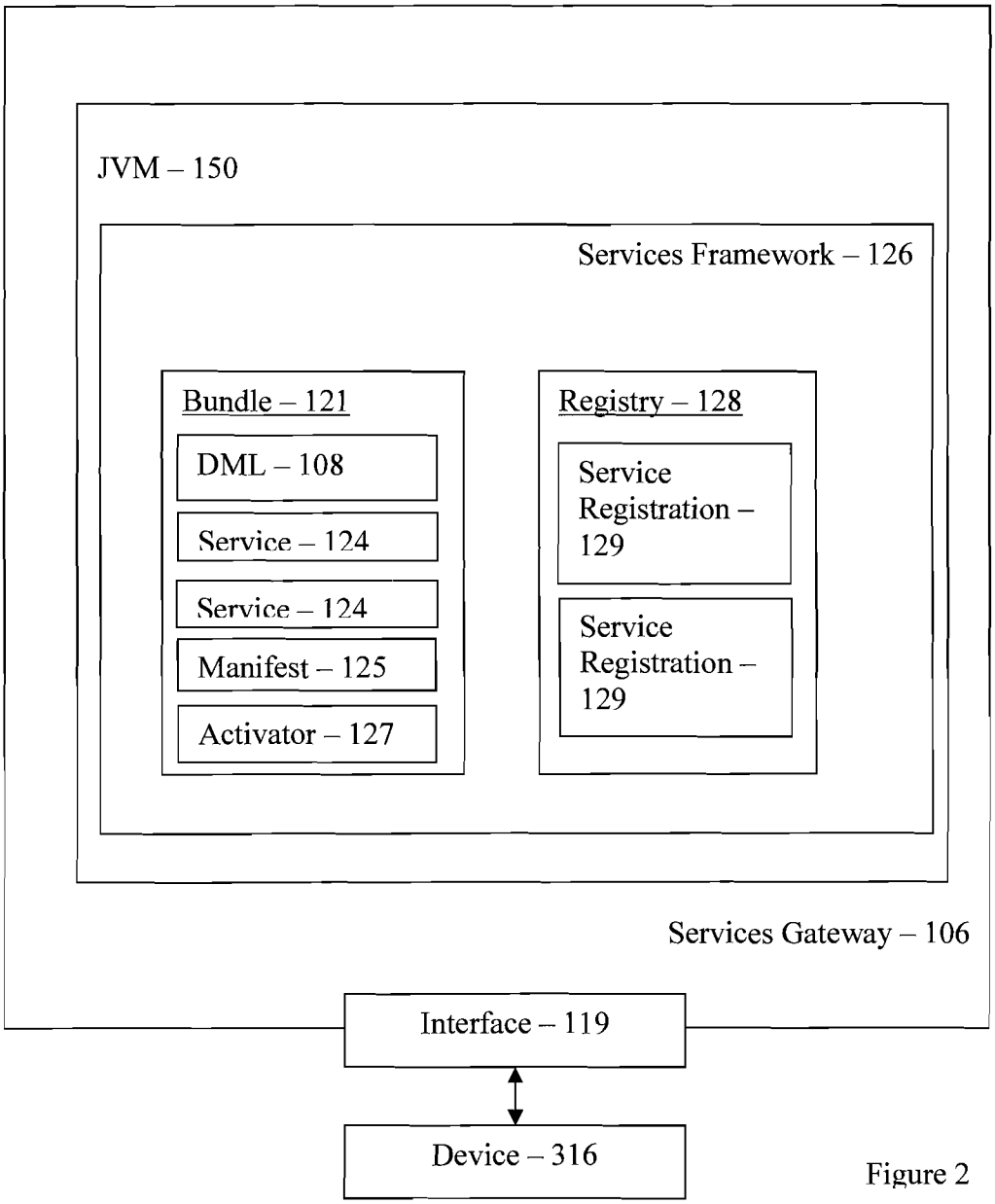
JVM – 150
Services Framework – 126
Bundle – 121
DML – 108
Service – 124
Service – 124
Manifest – 125
Activator – 127
Registry – 128
Service Registration – 129
Service Registration – 129
Services Gateway – 106
Interface – 119
Device – 316

Figure 2

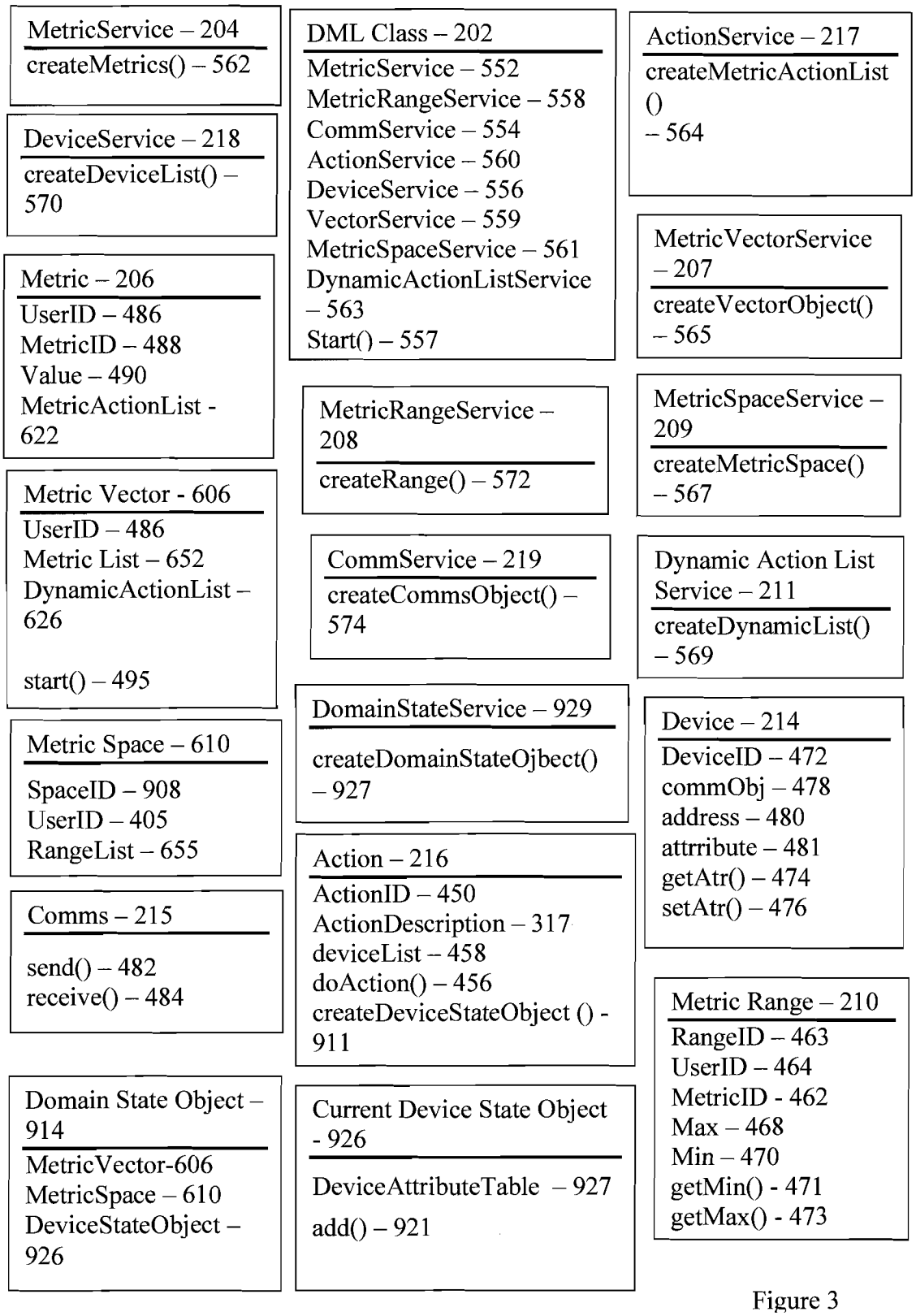
MetricService – 204
createMetrics() – 562
DeviceService – 218
createDeviceList() – 570
Metric – 206
UserID – 486
MetricID – 488
Value – 490
MetricActionList - 622
Metric Vector - 606
UserID – 486
Metric List – 652
DynamicActionList – 626
start() – 495
Metric Space – 610
SpaceID – 908
UserID – 405
RangeList – 655
Comms – 215
send() – 482
receive() – 484
Domain State Object – 914
MetricVector-606
MetricSpace – 610
DeviceStateObject – 926
DML Class – 202
MetricService – 552
MetricRangeService – 558
CommService – 554
ActionService – 560
DeviceService – 556
VectorService – 559
MetricSpaceService – 561
DynamicActionListService – 563
Start() – 557
MetricRangeService – 208
createRange() – 572
CommService – 219
createCommsObject() – 574
DomainStateService – 929
createDomainStateOjbect() – 927
Action – 216
ActionID – 450
ActionDescription – 317
deviceList – 458
doAction() – 456
createDeviceStateObject () - 911
Current Device State Object - 926
DeviceAttributeTable – 927
add() – 921
ActionService – 217
createMetricActionList () – 564
MetricVectorService – 207
createVectorObject() – 565
MetricSpaceService – 209
createMetricSpace() – 567
Dynamic Action List Service – 211
createDynamicList() – 569
Device – 214
DeviceID – 472
commObj – 478
address – 480
attrribute – 481
getAtr() – 474
setAtr() – 476
Metric Range – 210
RangeID – 463
UserID – 464
MetricID - 462
Max – 468
Min – 470
getMin() - 471
getMax() - 473

Figure 3

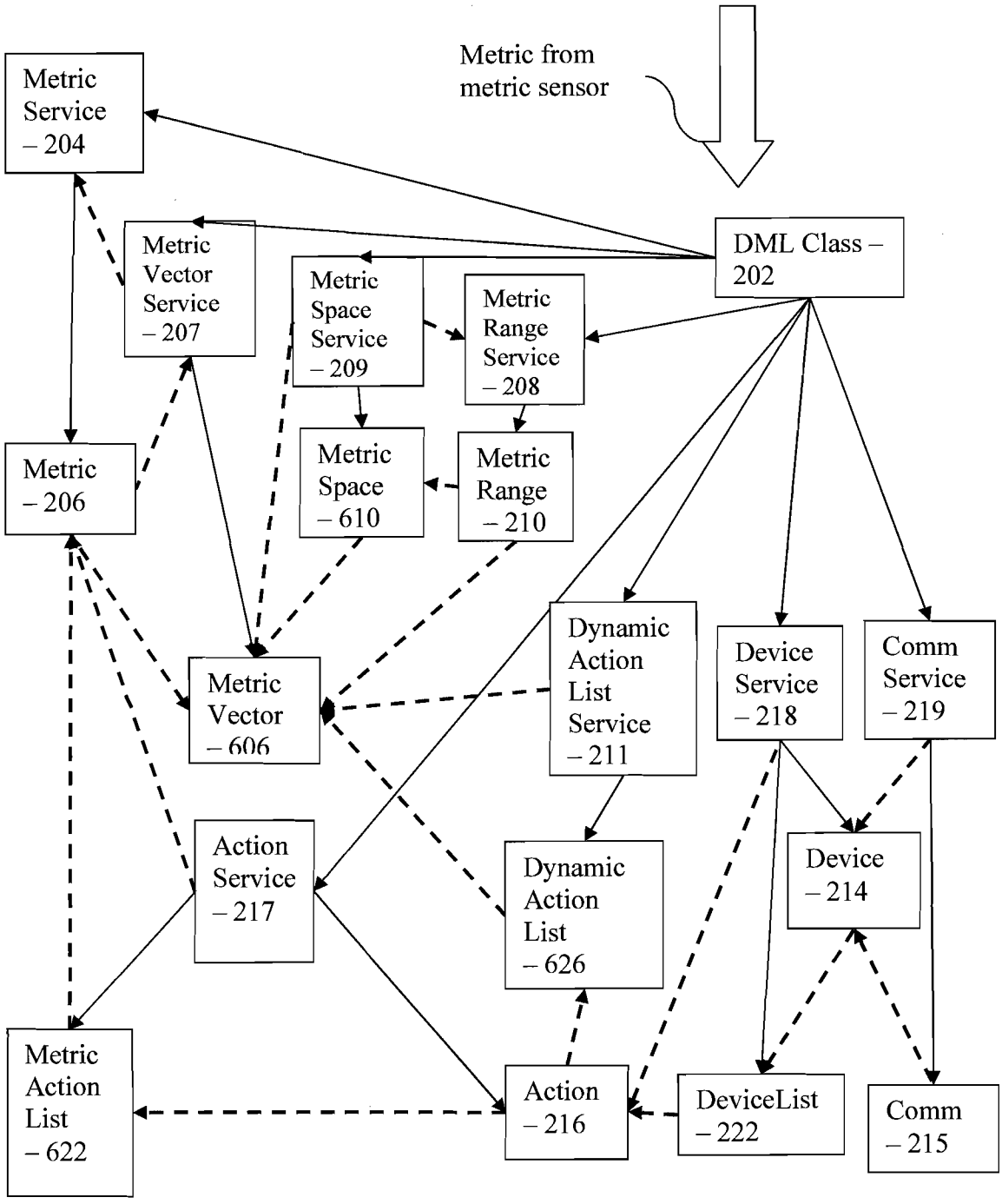
Metric from metric sensor
Metric Service – 204
Metric Vector Service – 207
Metric Space Service – 209
Metric Range Service – 208
DML Class – 202
Metric – 206
Metric Space – 610
Metric Range – 210
Dynamic Action List Service – 211
Device Service – 218
Comm Service – 219
Metric Vector – 606
Action Service – 217
Dynamic Action List – 626
Device – 214
Metric Action List – 622
Action – 216
DeviceList – 222
Comm – 215

Figure 4

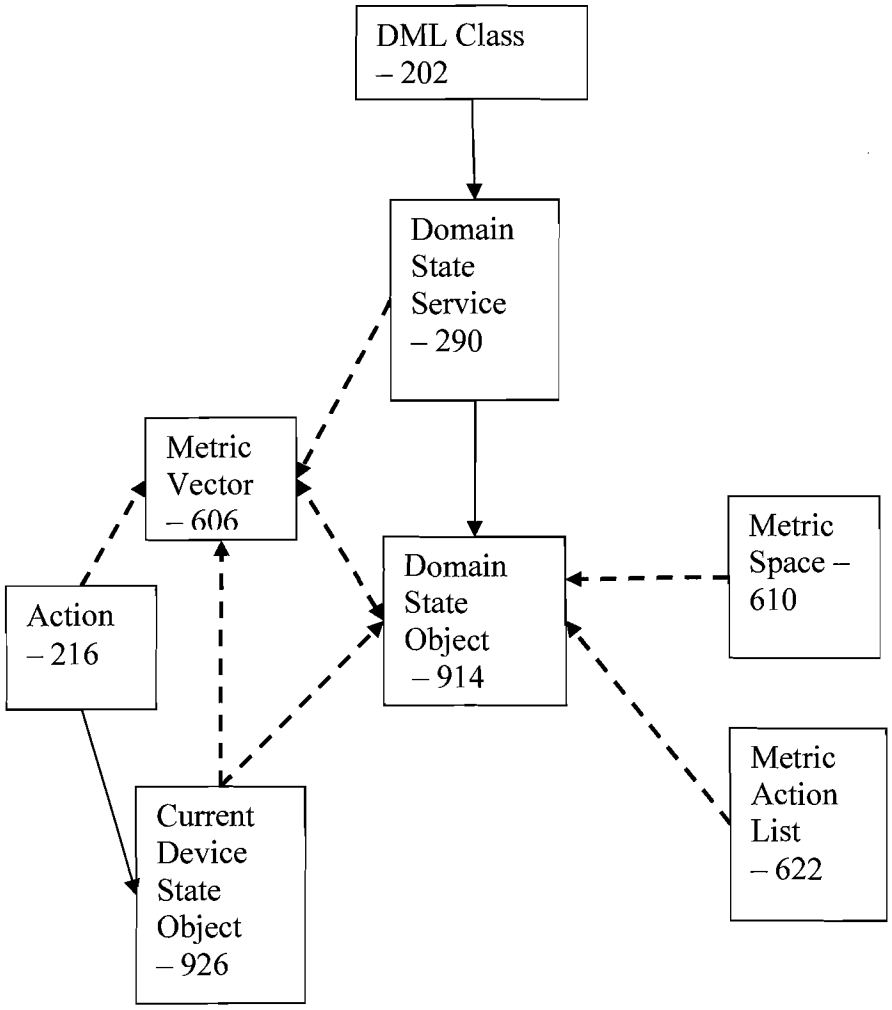
DML Class – 202
Domain State Service – 290
Metric Vector – 606
Action – 216
Domain State Object – 914
Metric Space – 610
Current Device State Object – 926
Metric Action List – 622

Figure 5

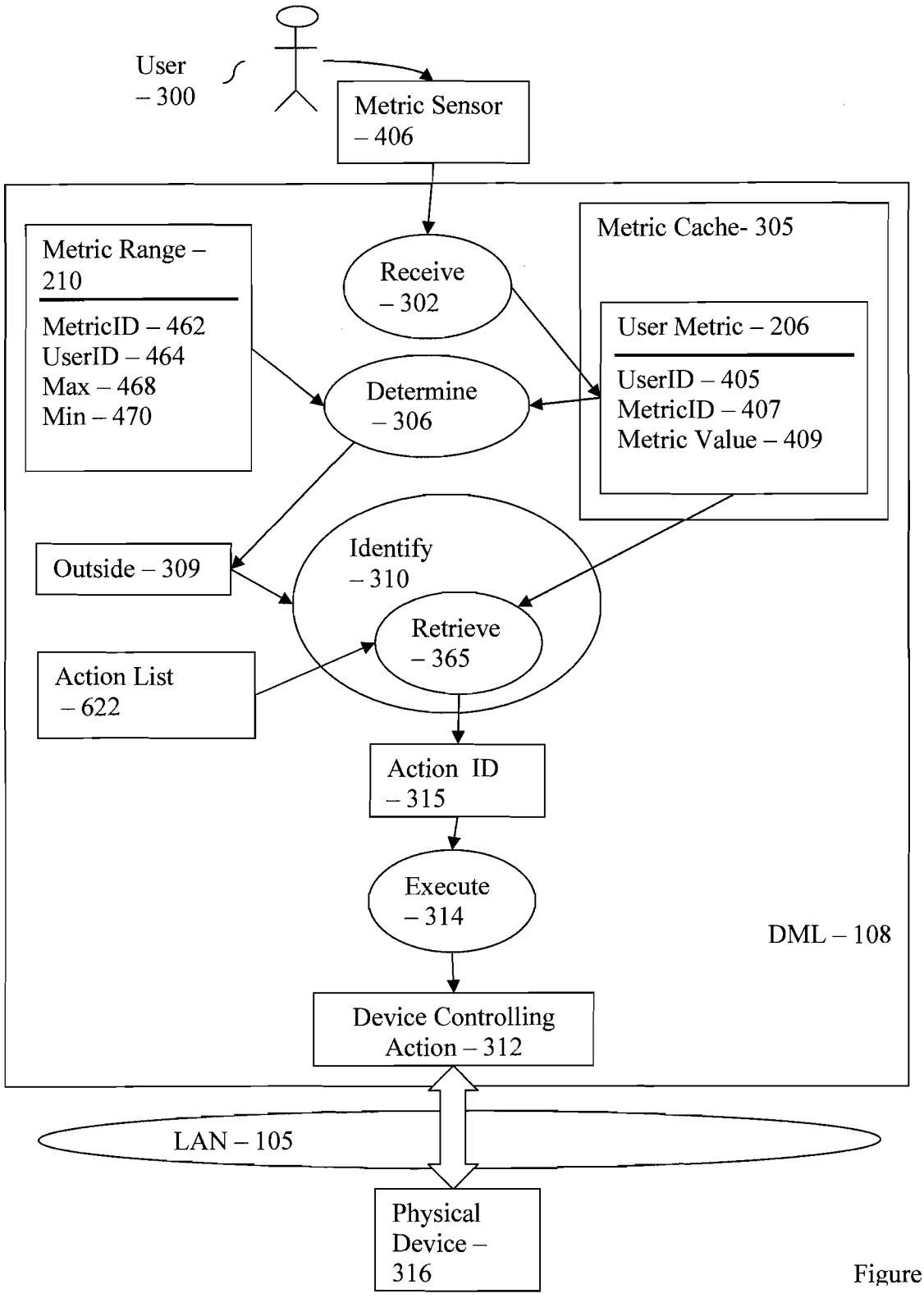
User – 300
Metric Sensor – 406
Metric Range – 210
MetricID – 462
UserID – 464
Max – 468
Min – 470
Receive – 302
Determine – 306
Metric Cache- 305
User Metric – 206
UserID – 405
MetricID – 407
Metric Value – 409
Outside – 309
Identify – 310
Retrieve – 365
Action List – 622
Action ID – 315
Execute – 314
DML – 108
Device Controlling Action – 312
LAN – 105
Physical Device – 316

Figure 6

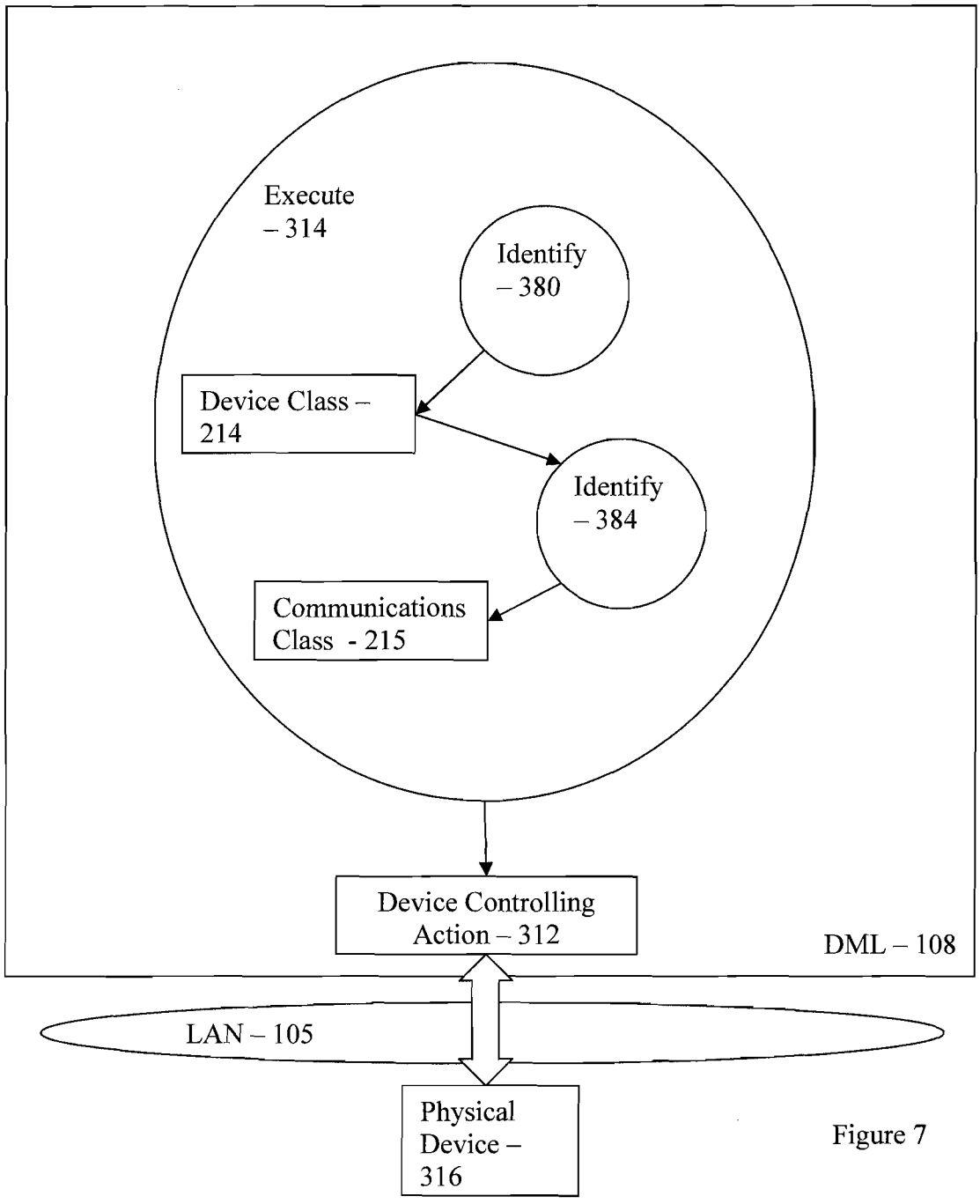

Figure 7

Informal Drawings

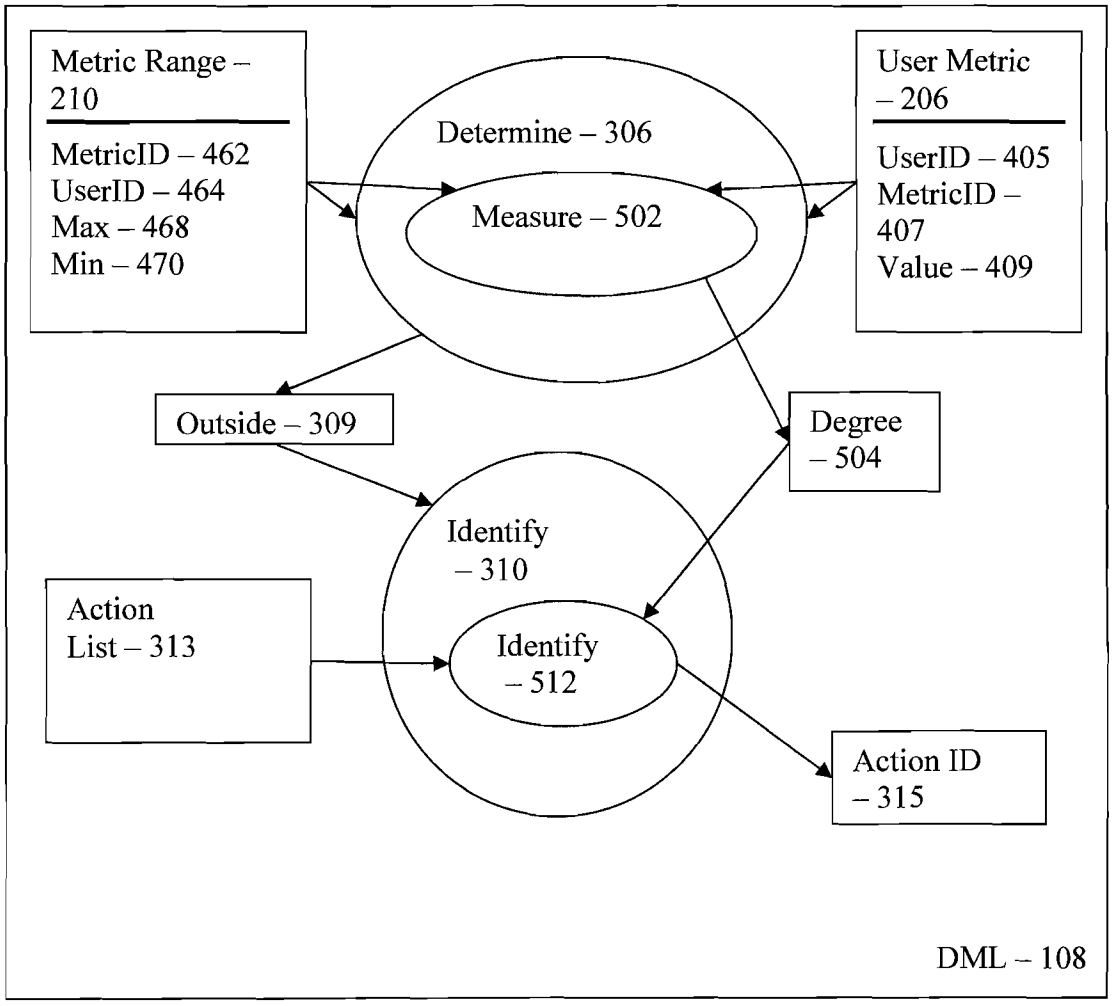
Metric Range – 210
MetricID – 462
UserID – 464
Max – 468
Min – 470
Determine – 306
Measure – 502
User Metric – 206
UserID – 405
MetricID – 407
Value – 409
Outside – 309
Degree – 504
Identify – 310
Action List – 313
Identify – 512
Action ID – 315
DML – 108

Figure 8

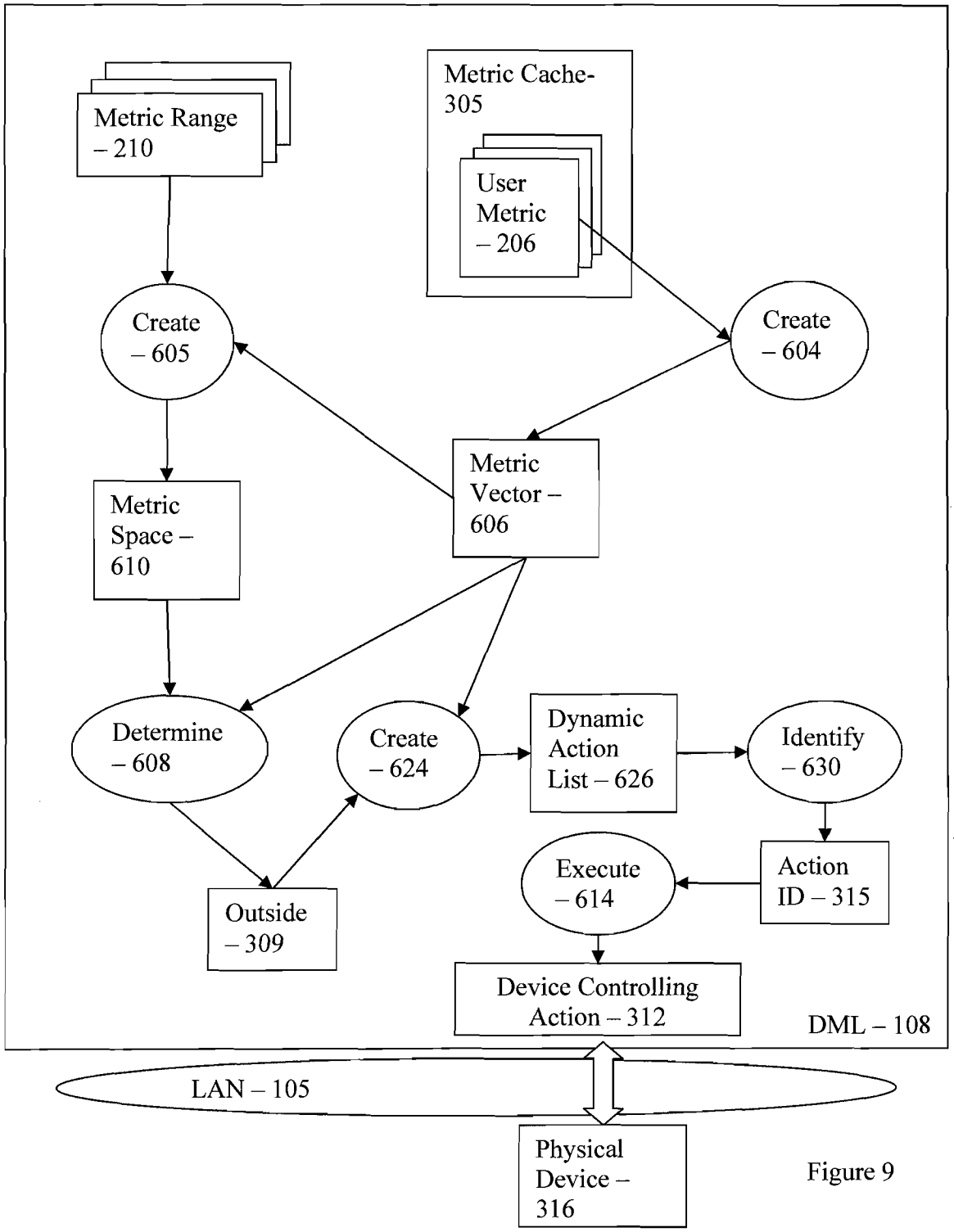
Metric Range – 210
Metric Cache- 305
User Metric – 206
Create – 605
Create – 604
Metric Vector – 606
Metric Space – 610
Determine – 608
Create – 624
Dynamic Action List – 626
Identify – 630
Execute – 614
Action ID – 315
Outside – 309
Device Controlling Action – 312
DML – 108
LAN – 105
Physical Device – 316

Figure 9

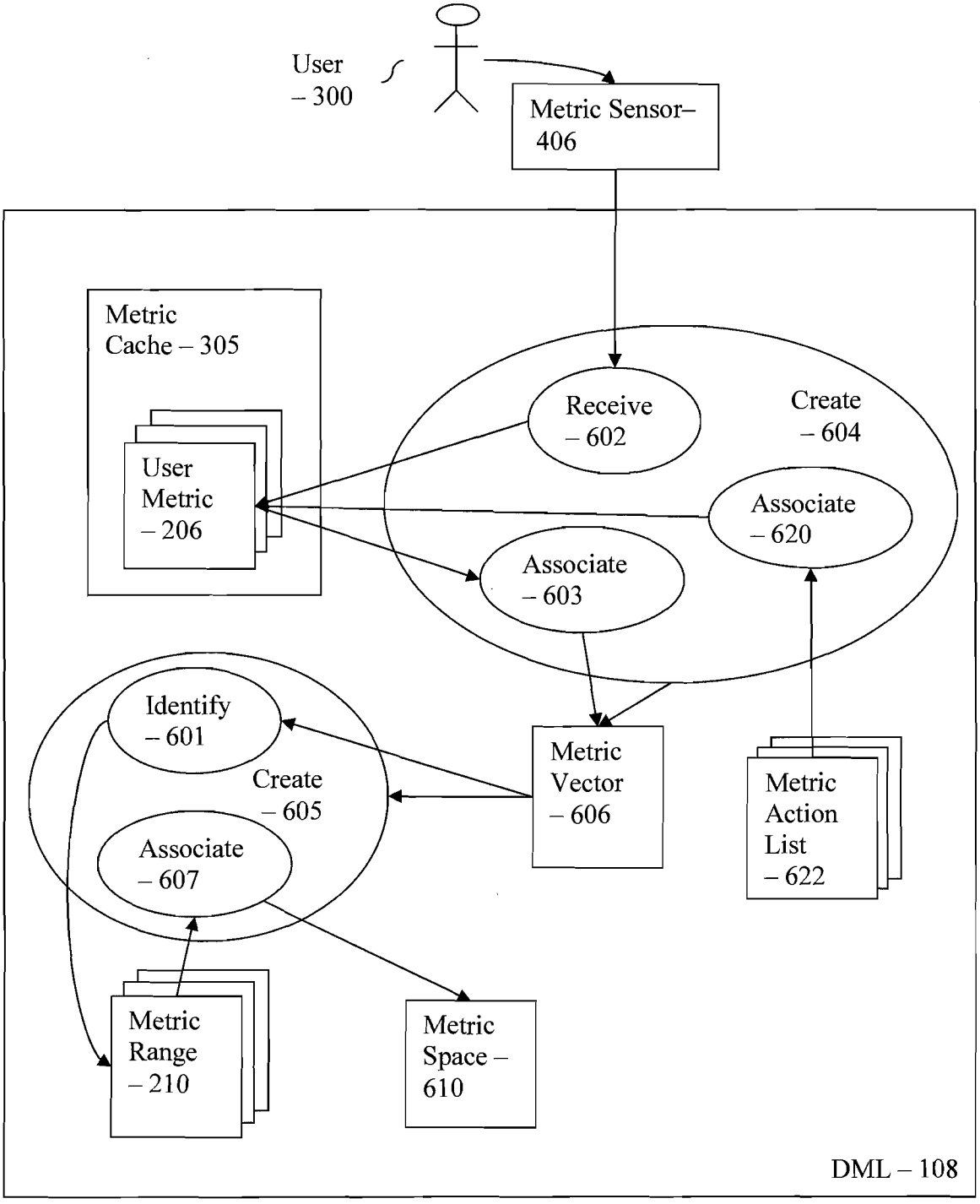
User
– 300
Metric Sensor–
406
Metric
Cache – 305
User
Metric
– 206
Receive
– 602
Create
– 604
Associate
– 620
Associate
– 603
Identify
– 601
Create
– 605
Associate
– 607
Metric
Vector
– 606
Metric
Action
List
– 622
Metric
Range
– 210
Metric
Space –
610
DML – 108

Figure 10

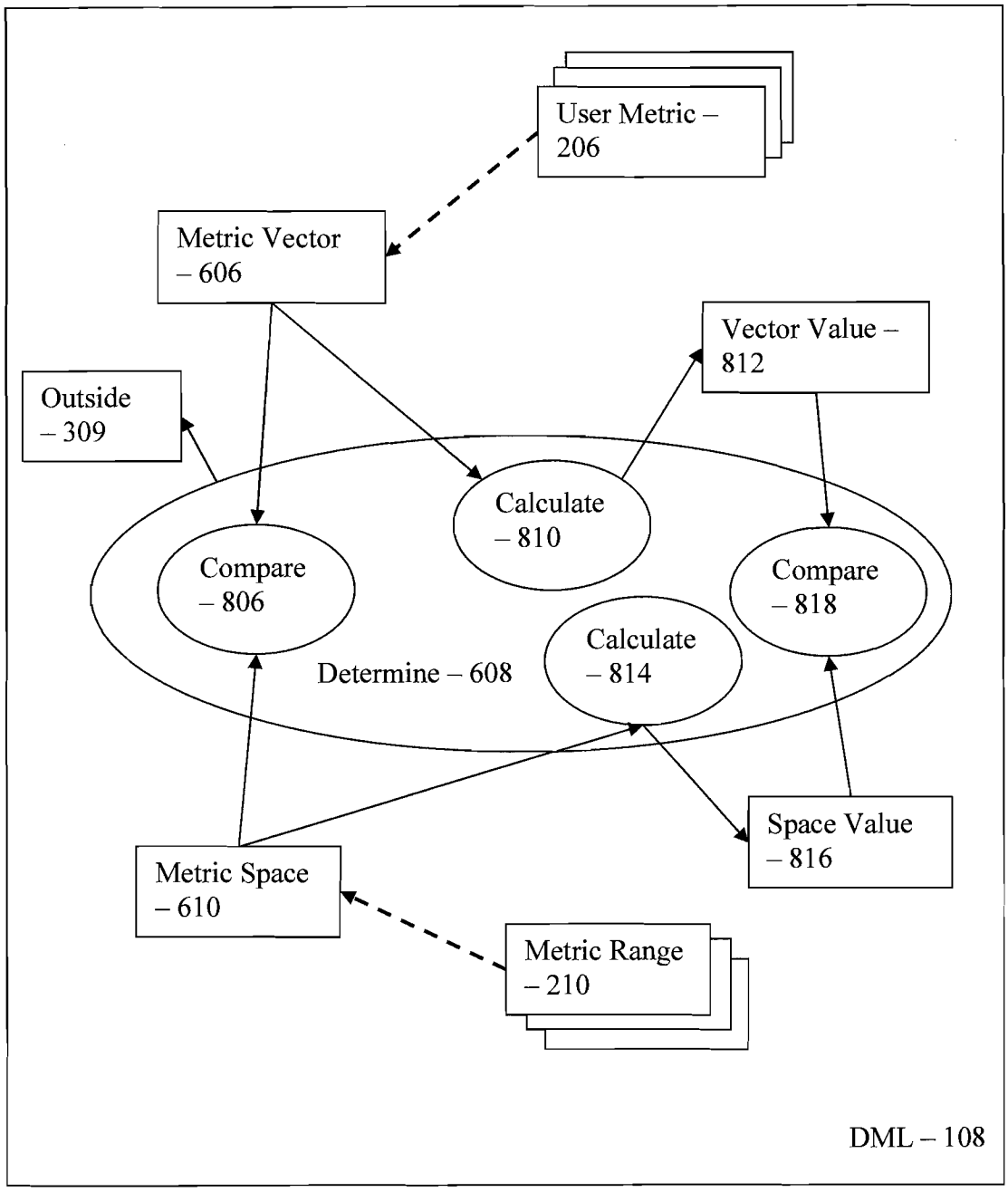

Figure 11

Informal Drawings

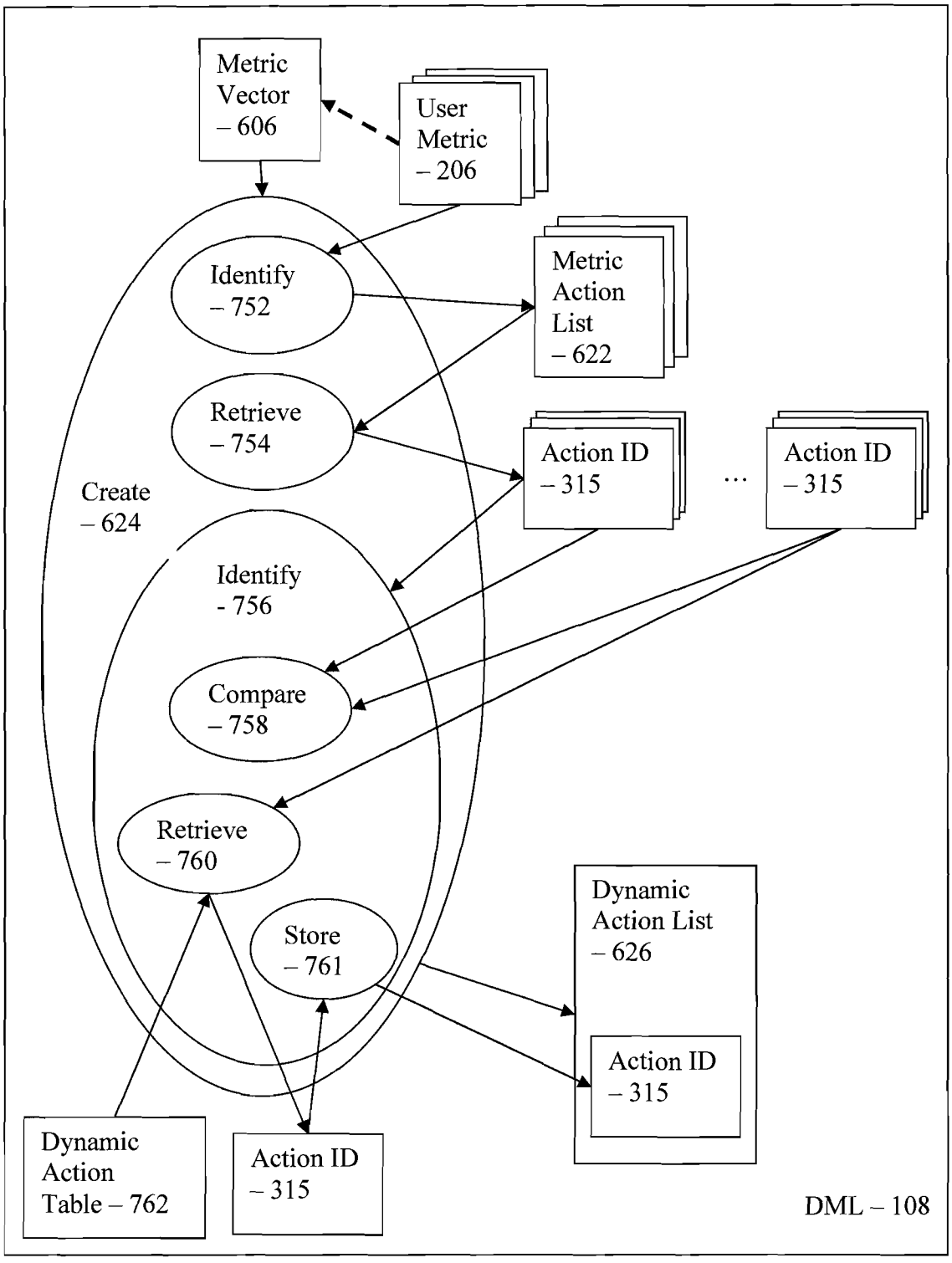
Metric Vector – 606
User Metric – 206
Identify – 752
Metric Action List – 622
Retrieve – 754
Action ID – 315
...
Action ID – 315
Create – 624
Identify - 756
Compare – 758
Retrieve – 760
Store – 761
Dynamic Action List – 626
Action ID – 315
Dynamic Action Table – 762
Action ID – 315
DML – 108

Figure 12

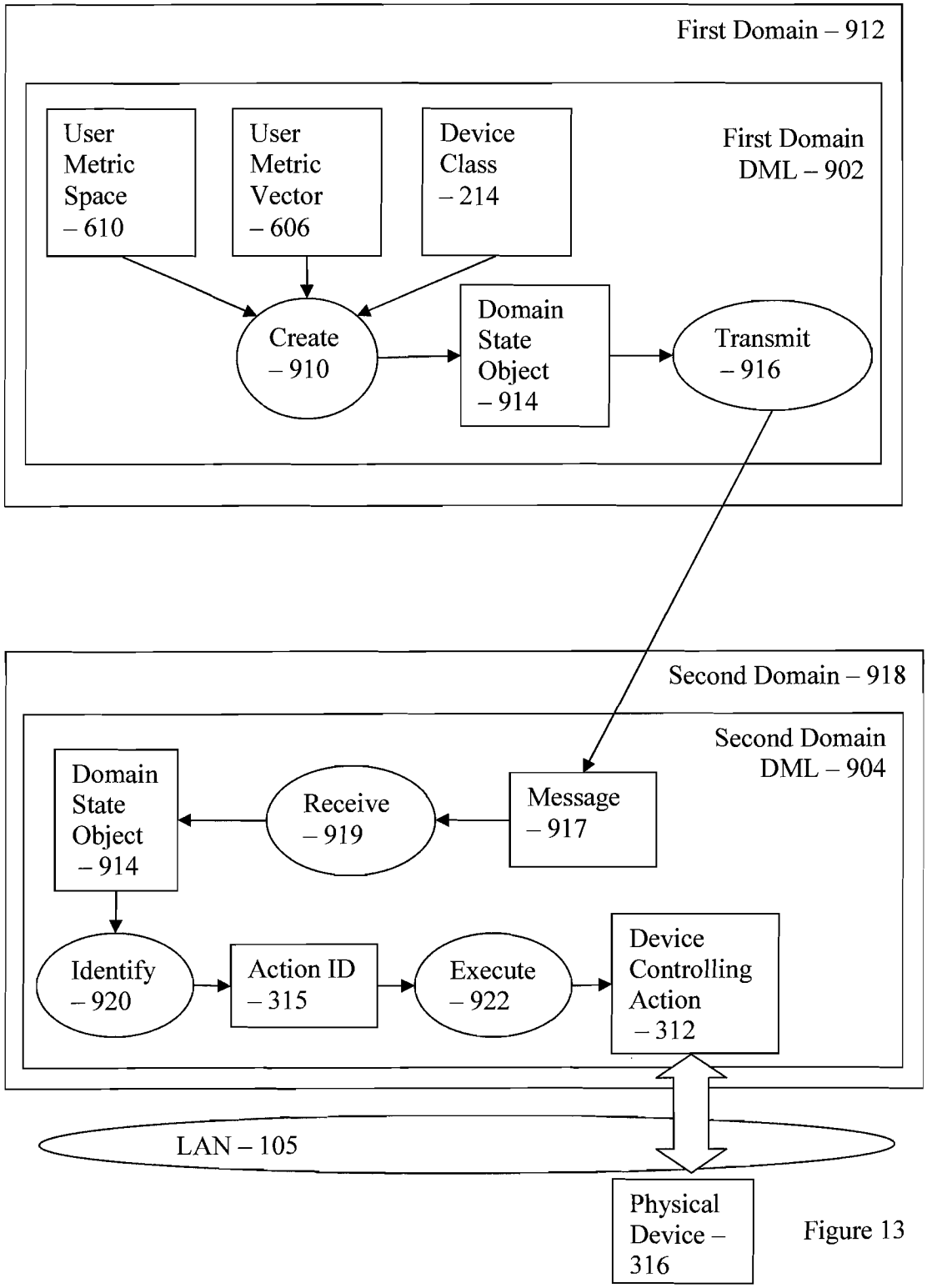
First Domain – 912
User Metric Space – 610
User Metric Vector – 606
Device Class – 214
First Domain DML – 902
Create – 910
Domain State Object – 914
Transmit – 916
Second Domain – 918
Second Domain DML – 904
Domain State Object – 914
Receive – 919
Message – 917
Identify – 920
Action ID – 315
Execute – 922
Device Controlling Action – 312
LAN – 105
Physical Device – 316

Figure 13

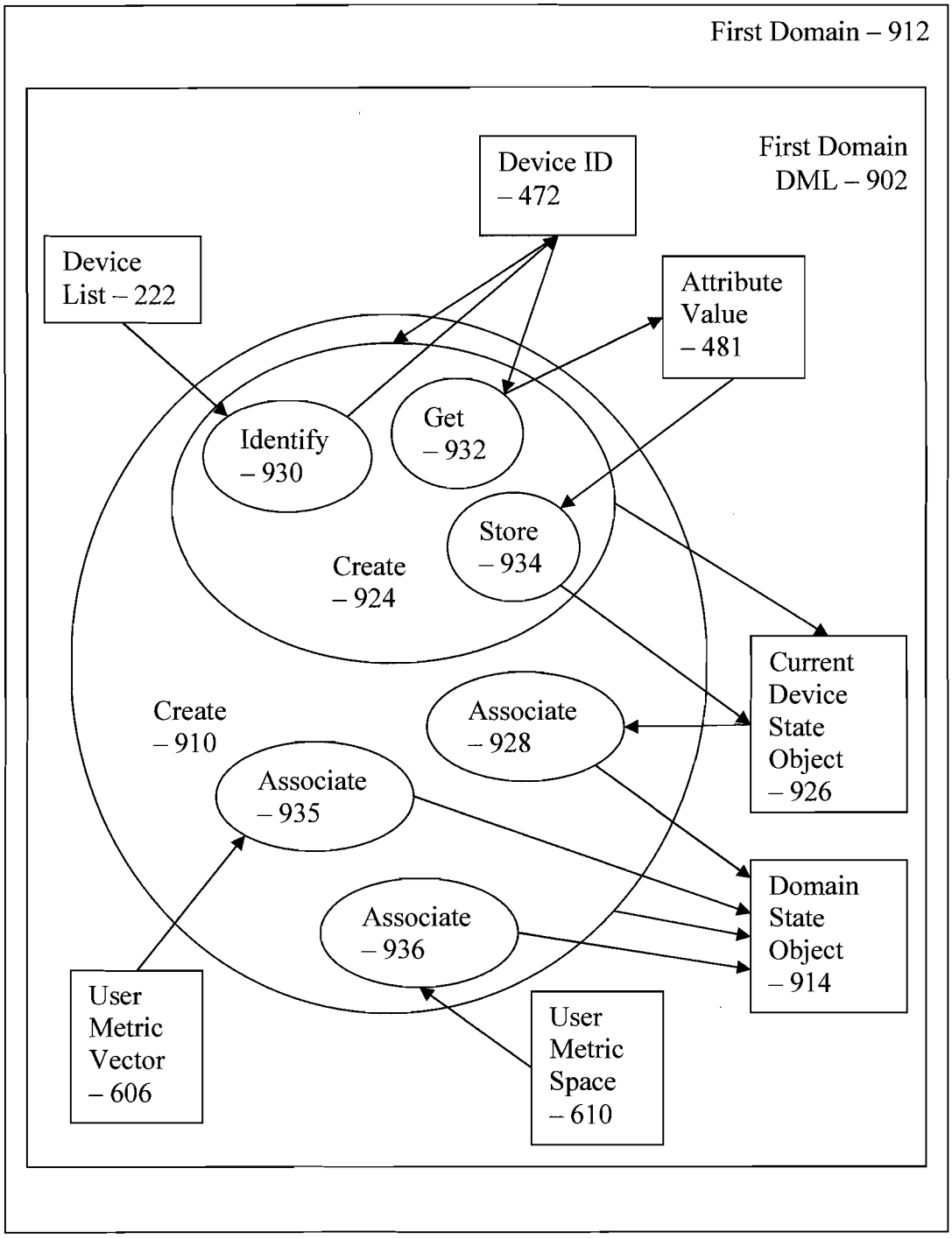
First Domain – 912
First Domain DML – 902
Device ID – 472
Device List – 222
Attribute Value – 481
Identify – 930
Get – 932
Store – 934
Create – 924
Create – 910
Associate – 928
Associate – 935
Associate – 936
Current Device State Object – 926
Domain State Object – 914
User Metric Vector – 606
User Metric Space – 610

Figure 14

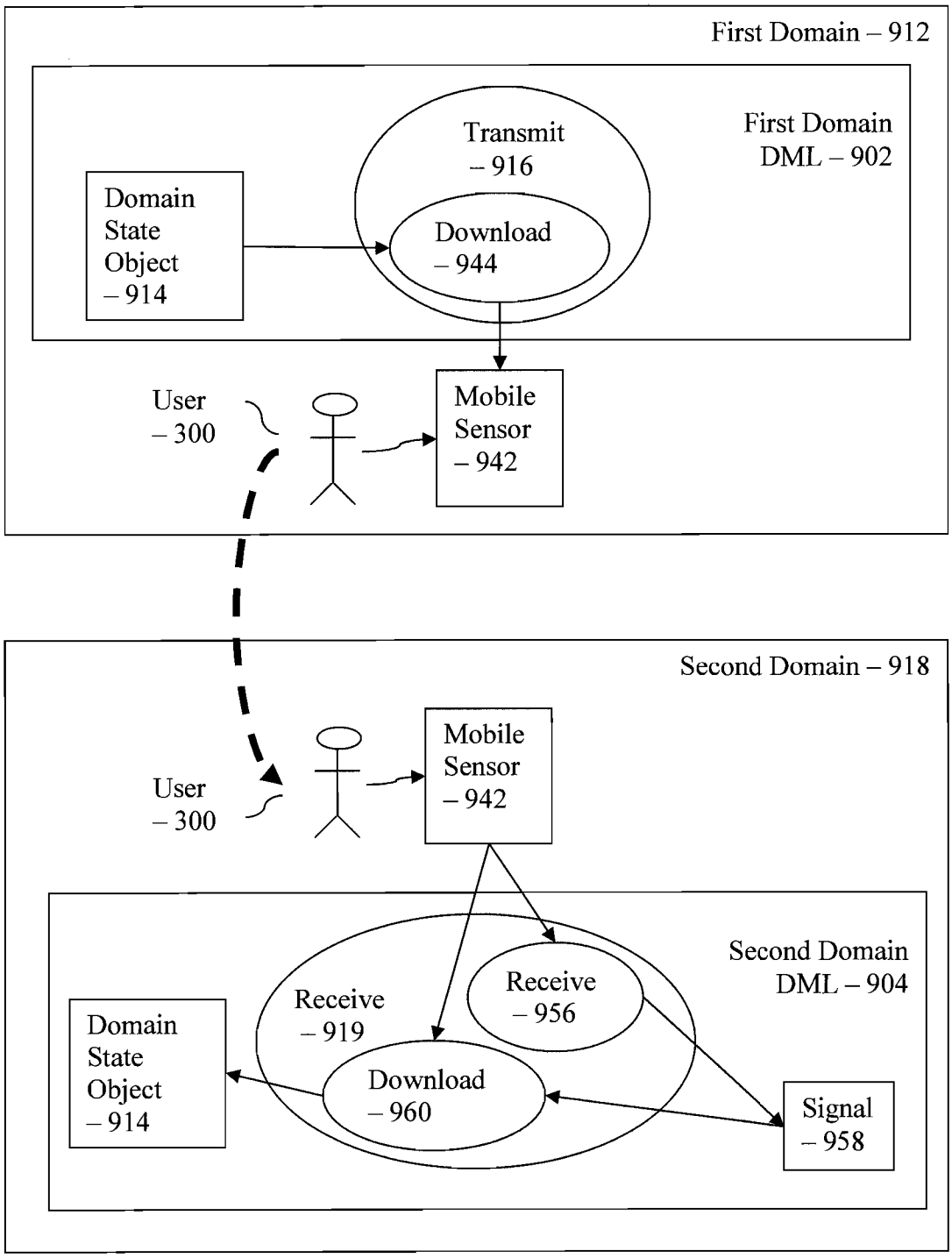
First Domain – 912
First Domain DML – 902
Transmit – 916
Download – 944
Domain State Object – 914
User – 300
Mobile Sensor – 942
Second Domain – 918
User – 300
Mobile Sensor – 942
Second Domain DML – 904
Receive – 919
Receive – 956
Download – 960
Domain State Object – 914
Signal – 958

Figure 15

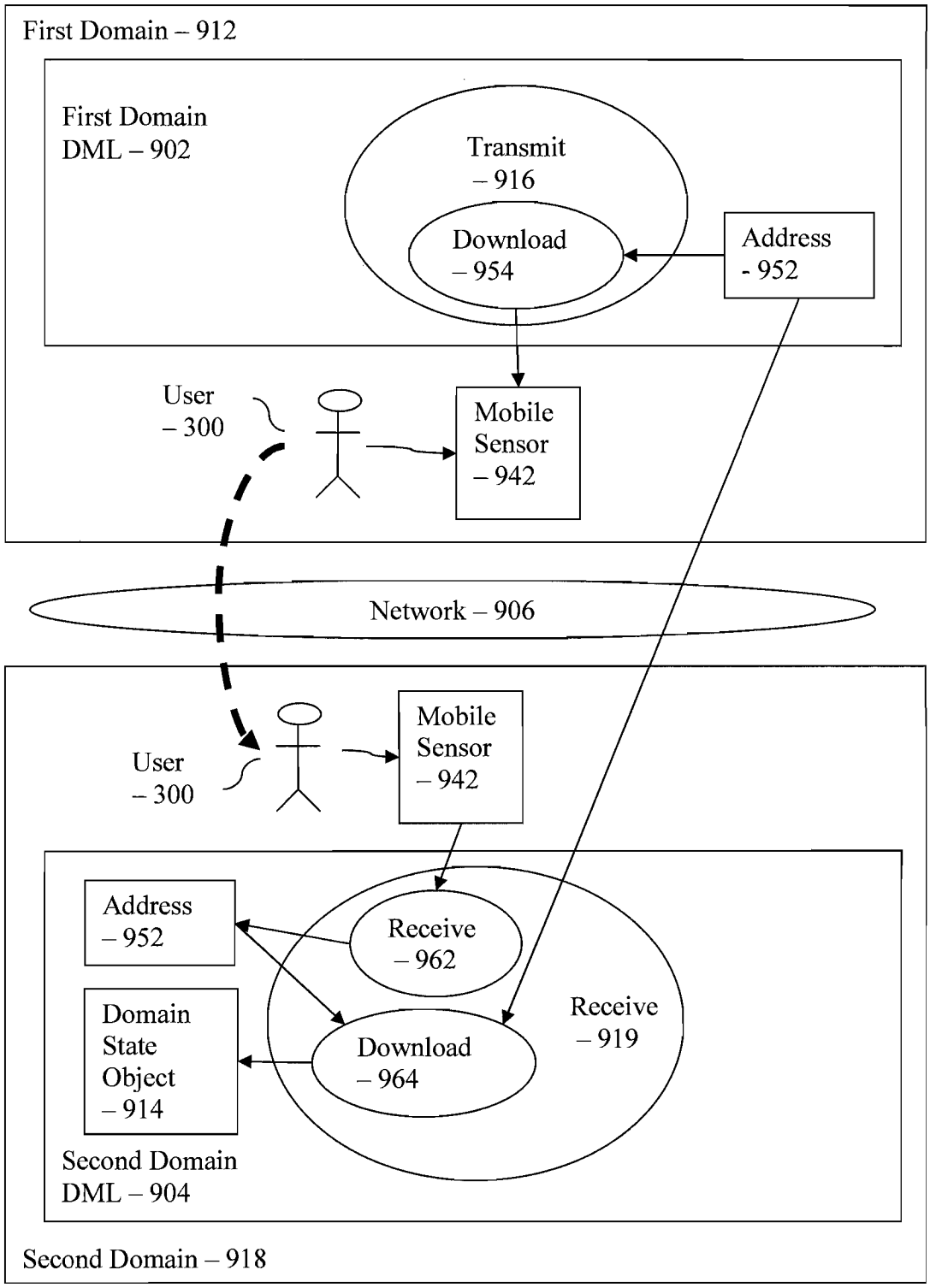
First Domain – 912
First Domain
DML – 902
Transmit
– 916
Download
– 954
Address
- 952
User
– 300
Mobile
Sensor
– 942
Network – 906
User
– 300
Mobile
Sensor
– 942
Address
– 952
Receive
– 962
Receive
– 919
Domain
State
Object
– 914
Download
– 964
Second Domain
DML – 904
Second Domain – 918

Figure 16

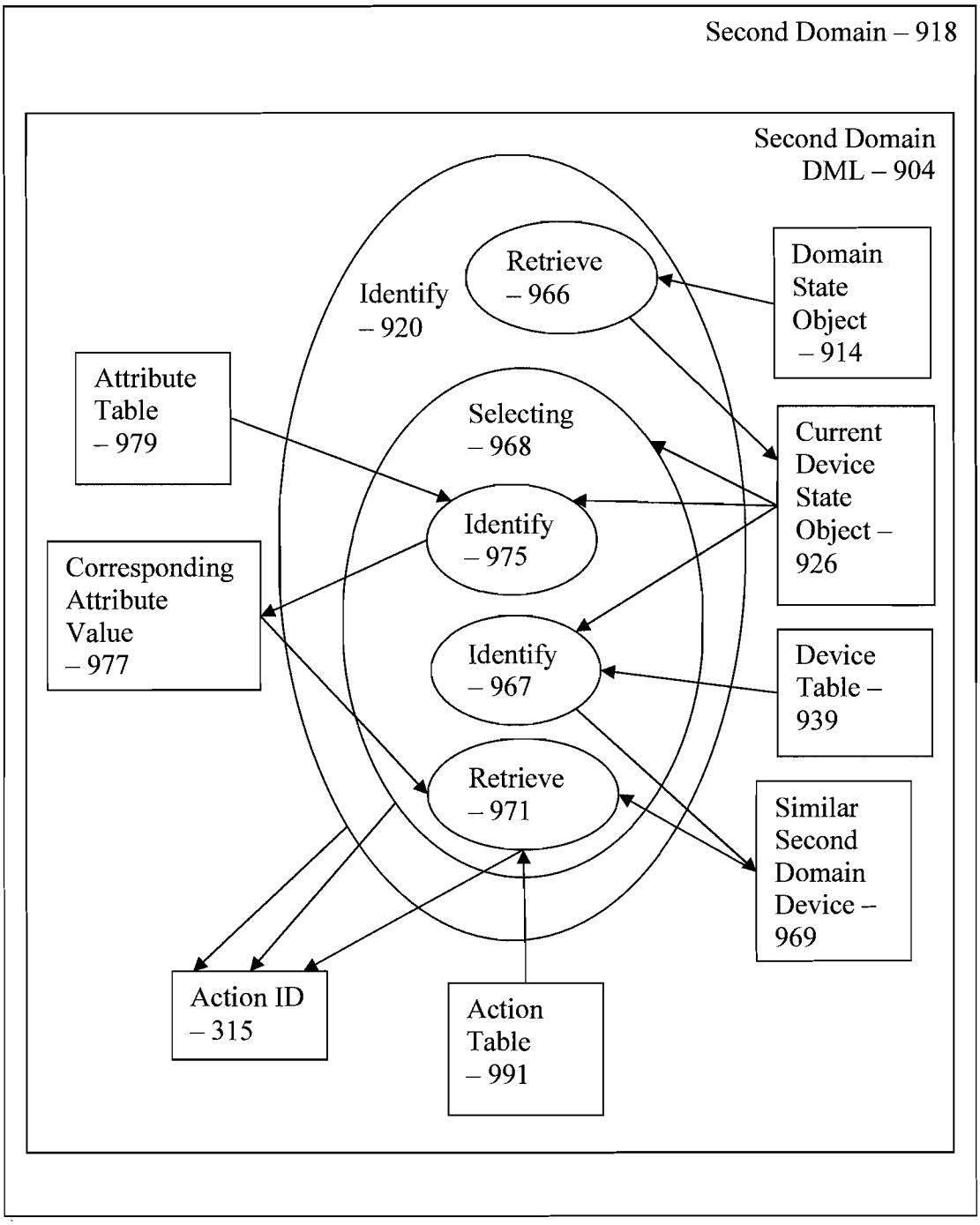
Second Domain – 918
Second Domain DML – 904
Identify – 920
Retrieve – 966
Domain State Object – 914
Attribute Table – 979
Selecting – 968
Current Device State Object – 926
Identify – 975
Corresponding Attribute Value – 977
Identify – 967
Device Table – 939
Retrieve – 971
Similar Second Domain Device – 969
Action ID – 315
Action Table – 991

Figure 17

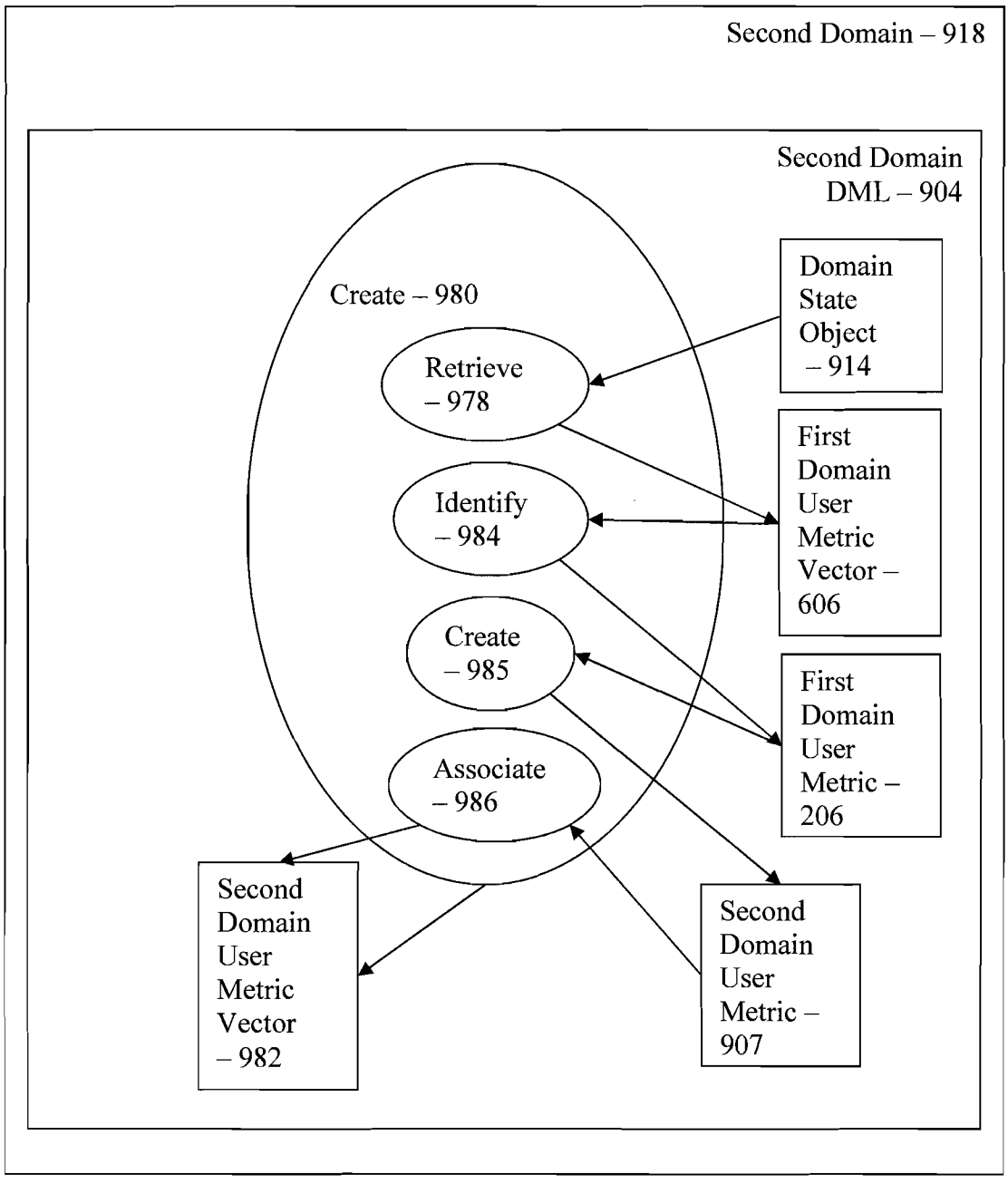
Second Domain – 918
Second Domain DML – 904
Create – 980
Retrieve – 978
Identify – 984
Create – 985
Associate – 986
Domain State Object – 914
First Domain User Metric Vector – 606
First Domain User Metric – 206
Second Domain User Metric Vector – 982
Second Domain User Metric – 907

Figure 18

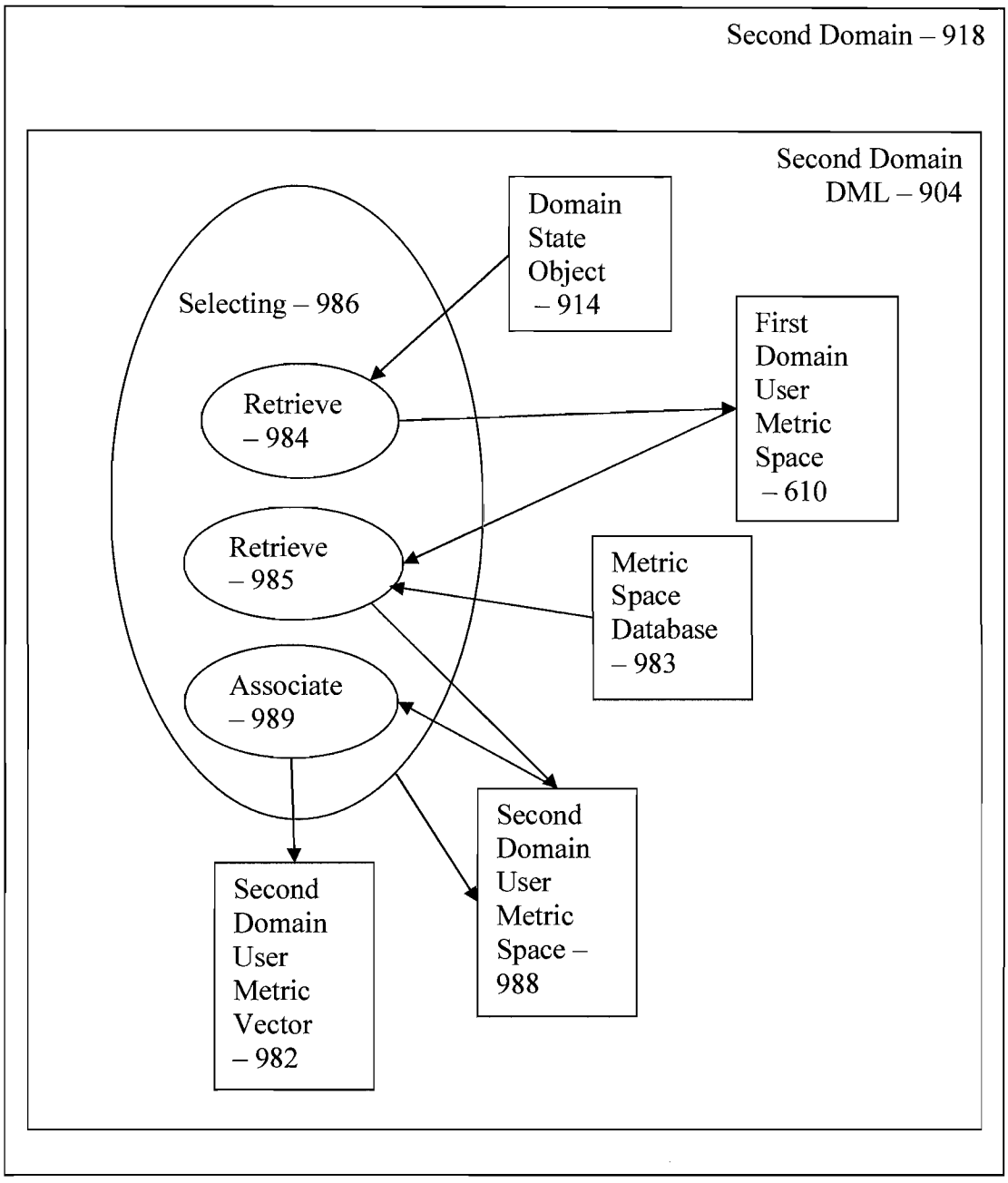
Second Domain – 918
Second Domain DML – 904
Domain State Object – 914
Selecting – 986
First Domain User Metric Space – 610
Retrieve – 984
Retrieve – 985
Metric Space Database – 983
Associate – 989
Second Domain User Metric Space – 988
Second Domain User Metric Vector – 982

Figure 19

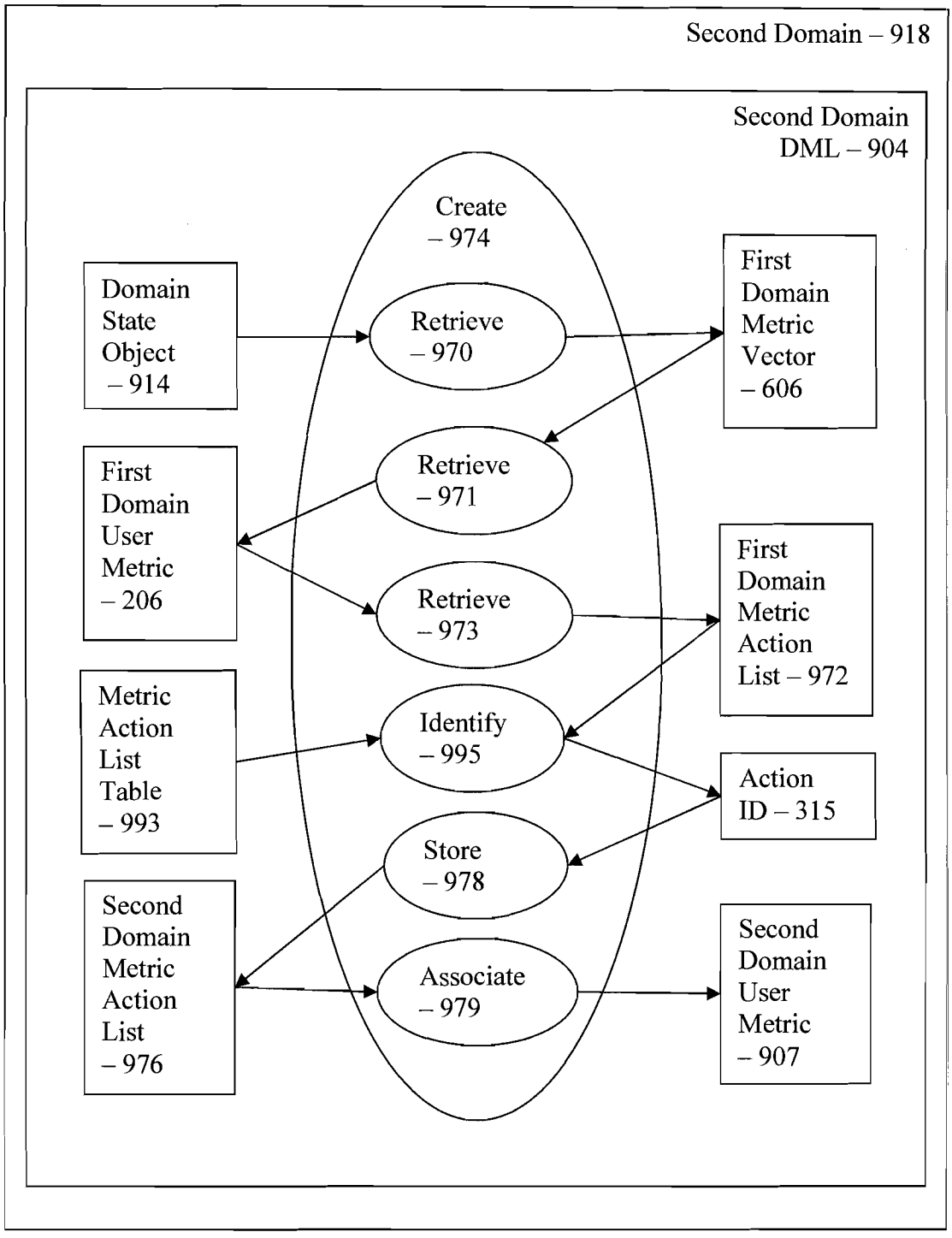
Second Domain – 918
Second Domain DML – 904
Create – 974
Domain State Object – 914
Retrieve – 970
First Domain Metric Vector – 606
First Domain User Metric – 206
Retrieve – 971
Retrieve – 973
First Domain Metric Action List – 972
Metric Action List Table – 993
Identify – 995
Action ID – 315
Store – 978
Second Domain Metric Action List – 976
Associate – 979
Second Domain User Metric – 907

Figure 20